

# Exception to Mendel

Incomplete dominance - heterozygous phenotype is a blend of the dominant and recessive phenotypes  
 Red (RR) x White (rr) → Pink (Rr)

Co-dominance - Both alleles contribute to the phenotype  
 Black ( $F^B F^B$ ) x White ( $F^W F^W$ ) → Black + White spots (F<sup>B</sup>F<sup>W</sup>)

Multiple Alleles - gene has more than 2 alleles  
 ex Blood Type = 3 alleles  
 A =  $I^A$       B =  $I^B$       O = i  
                     co-dominance                      Recessive

Genotype	Phenotype
$I^A I^A$ or $I^A i$	Type A
$I^B I^B$ or $I^B i$	Type B
$ii$	Type O
$I^A I^B$	Type AB

$I^A I^B$  x  $I^B i$

	$I^A$	$I^B$
$I^B$	$I^A I^B$	$I^B I^B$
i	$I^A i$	$I^B i$

Pheno:	Type AB	Type B	Type A
Geno:	$I^A I^B$	$I^B I^B$ or $I^B i$	$I^A i$
	25%	50%	25%
	1	2	1